

**REMARKS**

This Amendment, submitted in response to the Office Action dated July 30, 2010, is believed to be fully responsive to each point of rejection raised therein. Accordingly, favorable reconsideration on the merits is respectfully requested.

Claims 1-7, 9-16, 18 and 47-53 are all the claims pending in the application. Claims 1, 2, 5, 10, 11 and 14 are amended.

**I. Claim Objections**

Claim 5 is objected to because of a grammatical error. The Applicant herein amends claim 5 to correct the error, and respectfully requests withdraw of the objection.

**II. Claim Rejections- 35 U.S.C. § 112**

Claims 1, 2, 5, 9, 11, 14 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

***Claims 1, 9 and 10***

The Examiner first stated that claims 1 and 9 lack antecedent basis for the phrase in claim 1 stating “communication elements which is subsequently to receive the signal, wherein the recipient communication element determines whether a signal is destined to the element by referring to the ID included in the signal.” The Applicant herein amends claim 1 to recite “communication elements which is subsequently to receive the signal, wherein the recipient second communication element determines whether ~~a signal~~the signal is destined to the recipient

second communication element by referring to the ID included in the signal.” The Applicant submits that these amendments eliminate any antecedent basis issues in claim 1. The Applicant makes additional amendments to claim 1 to clarify references to certain claim elements.

The Applicant notes that claim 9 does not recite any elements which have been introduced in claim 1, from which claim 9 depends. Therefore, the Applicant submits that claim 9 fails to recite any elements which lack antecedent basis, and should therefore be definite under 35 U.S.C. § 112, second paragraph.

The Applicant does note that claim 10, rather than claim 9, recites elements similar to claim 1, and as such, the Applicant has reviewed and herein submits amendments to claim 10 to clarify references to certain claim elements.

***Claims 2, 5, 11 and 14***

The Examiner rejected claims 2, 5, 11 and 14, indicating that “the communication between the communication elements and the target device must be positively recited to clarify the meaning of local communication between the communication elements.” The Applicant herein submits amendments to claims 2, 5, 11 and 14 to more positively recite the communication between the communication elements, as suggested by the Examiner. Additional amendments to claims 1 and 10 have also been made to more positively recite the elements with regard to the communication between the communication elements. The Applicant submits that claims 2, 5, 11 and 14 now clearly recite the feature of communication between the communication elements, including the local communication described in claim 5.

### **III. Claim Rejections- 35 U.S.C. § 103**

Claims 1-7, 9-16, 18, 47-53 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Barber (US Pat: 7,262,702) in view of Reeb (US 4,792,790).

The Applicant respectfully disagrees, and submits that neither Barber nor Reeb, taken alone or in combination, teach or suggest the elements of independent claims 1 and 10.

#### ***Claims 1 and 10***

The Examiner cites to Barber as disclosing “a communication apparatus comprising: a first conductive layer, a second conductive layer; and a plurality of communication elements that are connected to the first conductive layer and the second conductive layer,” as recited in claims 1 and 10. The Examiner specifically cites to one embodiment of Barber in Figs. 14-16 for disclosing a first conductive layer 454a and a second conductive layer 454b. The embodiment in Figs. 14-16 describes a pest control system using a resistive network to determine different degrees of pest activity. *Barber*, col. 16, lines 54-56. However, the Examiner then cites to a different embodiment illustrated in Fig. 22 as disclosing sensors 894 that supposedly correspond to the plurality of communication elements that are connected to the first conductive layer and second conductive layer. The embodiment in Fig. 22 describes a pest control device which detects pest activity by monitoring a change in a magnetic field using the magnetoresistors 894. *Barber*, col. 22, lines 25-60. The Applicant first notes that Barber never discloses where the magnetoresistors 894 of Fig. 22 are connected to the conductive layers 454a and 454b of Fig. 14, nor is there any suggestion or motivation to do so. The Applicant further notes that the embodiment in Fig. 16 is completely different from the embodiment in Fig. 22 in terms of its

structure, composition, and mode of operation, as the embodiment in Fig. 16 is a resistive network, while the embodiment in Fig. 22 is a magnetic detection system.

The Applicant therefore submits that the combination of features from different embodiments in Barber is improper, as “the reference must clearly and unequivocally disclose the claimed [invention] or direct those skilled in the art to the [invention] without any need for picking, choosing and combining various disclosures not directly related to each other by the teachings of the cited reference.” *In re Arkley*, 455 F.2d 586, 587 (CCPA 1972). There is no teaching or suggestion in Barber to combine the magnetoresistor 894 of Fig. 22 with the resistive network of Fig. 16, nor would it be logical or even feasible to do so, considering the embodiments function using completely different mechanisms. Therefore, the Applicant submits that Barber fails to teach the elements of claims 1 and 10 of “a communication apparatus comprising: a first conductive layer, a second conductive layer; and a plurality of communication elements that are connected to the first conductive layer and the second conductive layer....”

The Applicant further notes that Barber as a whole fails to teach “a communication apparatus comprising: a first conductive layer, a second conductive layer; and a plurality of communication elements that are connected to the first conductive layer and the second conductive layer,” as recited in claims 1 and 10. The magnetoresistors in Fig. 22 of Barber are not connected to conductive layers, as they are instead connected on one side to a food matrix 834 which provides no conductive properties and on the other side to a substrate 838 which simply transmits the magnetic signals from the magnetoresistors 894 to a circuit 890 for data collection. Barber also fails to disclose where “a first communication element...initiates

transmission to a second communication element...,” as the magnetoresistors 894 in Barber do not communicate between each other. Furthermore, Barber fails to disclose where the magnetoresistor 894 “is operative to control a voltage between the first conductive layer and the second conductive layer,” as the magnetoresistors simply convey a signal to a substrate 838.

The Applicant notes that during the telephonic interview with the Examiner on October 14, 2010, the Examiner presented additional arguments indicating that the embodiment in Figs. 14-16 also disclose the plurality of communication elements connected to the first conductive layer and the second conductive layer since Barber discloses the presence of resistive members 455 positioned between layer 454a and 454b. The Examiner indicated that since the resistive members 455 do not “initiate transmission to a second communication element,” the magnetoresistors 894 are being cited for this element. However, as the Applicant already noted, even the magnetoresistors fail to disclose “a first communication element...initiating transmission to a second communication element,” as Barber fails to disclose any type of communication between the magnetoresistors 894 in Fig. 22.

The Examiner further argues that Barber discloses a communication circuit 880 in Fig. 22 which teaches “letting the second communication element receive a change in the voltage propagated around the first communication element as a signal.” However, the communication circuit 880 is not a “second communication element among the plurality of communication elements,” as the communication circuit 880 clearly is not “connected to the first conductive layer and second conductive layer.” The Examiner previously cited to the magnetoresistors 894 as the communication elements, not the communication circuit 880. There is no disclosure in

Barber of a first communication circuit 880 transmitting a signal to a second communication circuit 880, nor is there any disclosure in Barber of a magnetoresistor 894 transmitting a signal to a second magnetoresistor 894.

Reeb similarly fails to disclose the elements of claims 1 and 10 described above, as Reeb discloses only where a signal being transmitted can identify a particular layer of a structure from which the signal originates. Col. 19, lines 5-41. There is no disclosure in Reeb of a first conductive layer, second conductive layer or a plurality of communication elements that are connected to the first conductive layer and second conductive layer.

For at least the reasons stated above, the Applicant submits that neither Barber nor Reeb, taken alone or in combination, teach or suggest the elements of claims 1 and 10. Therefore, the Applicant requests that the rejection under 35 U.S.C. § 103(a) be withdrawn.

***Claims 2-7, 9, 11-16, 18 and 47-53***

The Applicant submits that claims 2-7, 9, 11-16, 18 and 47-53 are allowable at least in view of their dependency to their respective independent claims 1 and 10.

**IV. Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

AMENDMENT UNDER 37 C.F.R. § 1.111  
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The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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